

Claims

We Claim:

1. In a mobile cotton harvester having selectively operable processing structure connected to the harvester for processing harvested cotton in a field, accumulator structure comprising:

an upright storage area having side walls and having a lower discharge area, the upright storage area receiving the harvested cotton and facilitating continuous harvester operation;

a cotton metering structure including upper and lower rotatable spaced rollers, the metering structure defining an inclined accumulator floor angling downwardly towards the lower discharge area;

a drive connected to the metering structure for rotating the spaced rollers in a same direction to urge the received cotton from the storage area towards the lower discharge area; and

and a discharge roller located above the lower roller and discharge area, the discharge roller intercepting the cotton urged towards the lower discharge area to break up cotton clumps and meter cotton to the discharge area.

2. The accumulator structure set forth in claim 1 wherein the discharge roller is rotated in the same direction as the spaced rollers.

3. The accumulator structure as set forth in claim 2 including a discharge space located over the discharge roller, the discharge roller pulling cotton through the discharge space towards the discharge area.

4. The accumulator structure as set forth in claim 3 wherein the lower spaced roller pulls cotton under the discharge roller towards the discharge area.

5. The accumulator structure as set forth in claim 1 wherein the lower spaced roller pulls cotton under the discharge roller.

6. The accumulator structure as set forth in claim 5 including a cotton egress path located over the discharge roller and wherein the discharge roller pulls cotton through the cotton egress path as the discharge roller breaks the clumps of cotton.

7. The accumulator structure as set forth in claim 6 wherein the drive rotates the upper and lower spaced rollers and the discharge rollers in the same direction.

8. The accumulator structure as set forth in claim 7 wherein upper and lower spaced rollers rotate to pull cotton over spaced rollers.

9. The accumulator structure as set forth in claim 1 wherein the discharge roller is rotated at a speed higher than the speed of the upper and lower spaced rollers.

10. The accumulator structure as set forth in claim 1 wherein the discharge roller is located at least partially outside one of the walls of the upright storage area so that the discharge roller is only partially exposed to the cotton in the storage area above the discharge roller.

11. The accumulator structure as set forth in claim 10 wherein the side walls include an offset area housing the discharge roller and defining a discharge path over the discharge roller.

12. In a mobile cotton harvester having selectively operable processing structure connected to the harvester for processing harvested cotton in a field, accumulator structure comprising:

an upright storage area having side walls and having a downstream discharge area, the upright storage area receiving the harvested cotton and facilitating continuous harvester operation;

a cotton metering structure including means for defining an accumulator floor angling downwardly towards the downstream discharge area;

drive means connected to the metering structure for directing cotton over the floor towards the downstream discharge area; and

a discharge member located above the accumulator floor and discharge area, the discharge member intercepting the cotton directed towards the downstream discharge area to break up cotton clumps and meter cotton to the discharge area.

13. The accumulator structure set forth in claim 12 wherein the means for defining an accumulator floor includes spaced rollers and the drive means rotates

the spaced rollers in the same direction.

14. The accumulator structure as set forth in claim 13 wherein the discharge member includes a discharge roller located above the spaced rollers.

15. The accumulator structure as set forth in claim 14 wherein the discharge roller defines an upper discharge area above the lower discharge area, and wherein the discharge roller moves cotton through the upper discharge area.

16. The accumulator structure as set forth in claim 15 including a discharge roller drive rotating the discharge roller in the same direction as the spaced rollers.

17. The accumulator structure as set forth in claim 16 wherein the discharge roller drive rotates the discharge roller at a faster speed than spaced roller speed.

18. The accumulator structure as set forth in claim 12 wherein the means for defining an accumulator floor includes a continuous conveyor trained around the spaced rollers.

19. The accumulator structure as set forth in claim 14 wherein the spaced roller and the discharge rollers comprise rollers with projecting spiked members.

20. The accumulator structure as set forth in claim 19 wherein the discharge roller is rotated at a higher speed than the spaced rollers.